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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO 09/678,783 10/04/2000 Nicholas W. Dawes 551P08US-1 6059 20779 7590 07/06/2004 **EXAMINER** SHAPIRO COHEN DUONG, FRANK P.O. BOX 3440 PAPER NUMBER ART UNIT STATION D OTTAWA, ON K1P6P1 2666 **CANADA** DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	09/678,783	DAWES ET AL.	
	Examiner	Art Unit	
	Frank Duong	2666	
The MAILING DATE of this communication appeared for Reply	opears on the cover sheet t	vith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above, the maximum statutory perior - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).		reply be timely filed irty (30) days will be considered timely. INTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 04	October 2000.		
2a) ☐ This action is FINAL . 2b) ☑ Th	☐ This action is FINAL . 2b)☑ This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims			
 4) ⊠ Claim(s) 1-16 is/are pending in the application 4a) Of the above claim(s) is/are withdrest 5) ⊠ Claim(s) 11-16 is/are allowed. 6) ⊠ Claim(s) 1-10 is/are rejected. 			
7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Examir	ner.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document of: 2. Certified copies of the priority document of: 3. Copies of the certified copies of the priority document of the priority document of the certified copies of the	nts have been received. nts have been received in lonity documents have bee au (PCT Rule 17.2(a)).	Application No n received in this National Stage	
Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 3.	Paper No	Summary (PTO-413) v(s)/Mail Date Informal Patent Application (PTO-152) 	

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DETAILED ACTION

1. This Office Action is a response to the communication dated 10/04/00. Claims 1-16 are pending in the application.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement filed 11/07/01 complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. It has been considered and placed in the application file.

Specification

4. The incorporation of essential material in the specification, discussed on page 15, lines 21-22, by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ

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157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, limitation c) recites "combining routing results obtaining in step b) to obtain a total route through the network" is ambiguous because there isn't any "routing result" is obtained in step b). It is unclear what Applicants intend to claim in reciting the disputed limitation. As a result, the claim is deemed indefinite.

Dependent claims 2-10 variously depend from their indefinite parent claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Grau et al (USP 5,910,803) (hereinafter "Grau").

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Regarding **claim 1**, in accordance with Grau reference entirety, Grau discloses a method for determining a routing for packets in a network, said method (Figs. 7A-7B and col. 8, line 11 to col. 11, line 60) comprising:

- a) dividing said network into WAN (Wide Area Network) segments and LAN (Local Area Network) segments (col. 8, line 11- col. 9, line 43);
- b) determining a routing for packets through each segment (col. 13, lines 6-13; Route tracing);
- c) combining routing results obtained in step b) to obtain a total routing through the network (col. 13, lines 14-20).

Regarding **claim 2**, in addition to features recited in base claim 1 (see rationales discussed above), Grau further discloses wherein step a) includes determining which network objects (*AtlasPage objects*) are routers (*col. 8, lines 62-67*) and which network objects (*AtlasNode objects*) are non-routers (*col. 8, lines 51-61 and col. 9, lines 12-18*).

Regarding **claim 3**, in addition to features recited in base claim 2 (see rationales discussed above), Grau further discloses partitioning non-router network objects into discrete LAN segments, each LAN segment being a collection of connected non-router network objects separated from other non-router network objects by at least one router (col. 8, lines 51-61 and col. 9, lines 12-18 and col. 11, line 61 to col. 34 and thereinafter).

Regarding **claim 4**, in addition to features recited in base claim 2 (see rationales discussed above), Grau further discloses partitioning routers into WAN segments, each WAN segment being a collection of connected routers separated from other routers by

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at least one non-router network object (col. 8, lines 51-67 and col. 11, line 61 to col. 34 and thereinafter).

Regarding **claim 5**, in addition to features recited in base claim 4 (see rationales discussed above), Grau further discloses wherein step b) includes determining for each WAN segment a sequence of routers a packet passes through from a source router to a destination router in the WAN segment (*col. 13, lines 6-20*).

Regarding **claim 6**, in addition to features recited in base claim 3 (see rationales discussed above), Grau further discloses wherein step b) includes determining for each segment which non-router objects a packet passes through from a source non-router to a destination non-router in the LAN segment (*col. 13*, *lines 6-20*).

Regarding **claim 7**, in addition to features recited in base claim 1 (see rationales discussed above), Grau further discloses wherein step b) is executed from a plurality of beacons located at different points in the network (col. 13, lines 16-20, Grau discloses protocol-specific topology tracing feature includes viewing of individual protocol routing in the context of the entire network corresponding to the claimed feature as recited).

Regarding **claim 8**, in addition to features recited in base claim 6 (see rationales discussed above), Grau further discloses wherein step b) include reading a table of source addresses (*topology database*) at each non-router network object in each LAN segment, said table containing source addresses of packets which transit through said non-router network object (*col. 8*, *lines 40-43 and thereinafter*).

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Regarding **claim 9**, in addition to features recited in base claim 3 (see rationales discussed above), Grau further discloses wherein step b) is accomplished using a previously determined topology of the network (see col. 13, lines 16-20).

Regarding **claim 10**, in addition to features recited in base claim 5 (see rationales discussed above), Grau further discloses wherein the sequence of routers a packet passes through is determined from a plurality of beacons located at different points in the network (col. 13, lines 16-20, Grau discloses protocol-specific topology tracing feature includes viewing of individual protocol routing in the context of the entire network corresponding to the claimed feature as recited).

Allowable Subject Matter

- 7. Claims 11-16 are allowed.
- 8. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record, considered individually or in combination, fails to fairly show or suggest the claimed method of determining a packet's route through a LAN segment, comprising, among other limitations, the novel and unobvious limitation of "determining which network objects are in a route from the source network object to the destination network objects based on data obtained in steps c) and d)" functionally interconnected with other limitations in a manner as recited in claim 11.

The prior art of record, considered individually or in combination, fails to fairly show or suggest the claimed method of determining the performance of a route in a network, comprising, among other limitations, the novel and unobvious limitations of "d)

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measuring the network performance of each network object on the route; and e) aggregating the network performances obtained in step d) to obtain a total network performance for the route" functionally interconnected with other limitations in a manner as recited in independent claim 12. Dependent claims 13-16 further limit the indicated allowed base claim 12.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Breibart et al (USP 6,697,338).

Vasconcellos (USP 6,003,074).

Ahearn et al (USP 5,926,463).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is (703) 308-5428. The examiner can normally be reached on 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank Duong Examiner Art Unit 2666

Jun 23, 2004